

IN THE CLAIMS

Please amend the claims as follows:

1. (original) A method of processing a stereo signal obtained from an encoder, which encoder encodes an N-channel audio signal into left and right signals ($L_0; R_0$) and spatial parameters (P), the method comprising:

- processing said left and right signals in order to provide processed signals ($L_{0w}; R_{0w}$), in which said processing is controlled in dependence of said spatial parameters (P).

2. (original) The method of claim 1, wherein said processing is controlled by a first parameter ($w_l; w_r$) for each of said left and right signals, said first parameter being dependent on the spatial parameters (P).

3. (original) The method of claim 2, wherein said first parameter ($w_l; w_r$) is a function of time and/or frequency.

4. (currently amended) The method of claim 1, ~~2 or 3~~ wherein said processing comprises filtering at least one of said left and right signals with a transfer function which depends on the spatial parameters (P).

5. (currently amended) The method of claim 1, ~~2, 3 or 4~~, wherein said processing comprises:

- adding a first, second and third signal in order to obtain said processed channel signals ($L_{0w}; R_{0w}$), in which the first signal includes the stereo signal modified by a first transfer function ($L_0 * H_A; R_0 * H_F$), the second signal includes the stereo signal of the same one channel modified by a second transfer function ($L_0 * H_B; R_0 * H_G$), and the third signal includes the stereo signal of the other channel modified by a third transfer function ($R_0 * H_D; L_0 * H_C$).

6. (original) The method of claim 5, wherein said second transfer function ($H_B; H_G$) comprises a multiplication with said first parameter ($W_1; W_r$) followed by multiplication with a first filter function ($H_1; H_4$).

7. (original) The method of claim 5, wherein said first transfer function ($H_A; H_F$) comprises a multiplication with a second parameter.

8. (original) The method of claim 5, wherein said first transfer function ($H_A; H_F$) comprises a multiplication with a second parameter

in which said first parameter is a function of said second parameter.

9. (currently amended) The method of claim 5, ~~6, 7 or 8~~, wherein said third transfer function ($H_1; H_D$) comprises a multiplication of the left or right signal ($L_0; R_0$) with said first parameter ($W_1; W_r$) followed by a second filter function ($H_2; H_3$).

10. (currently amended) The method of claim 6, ~~7, 8 or 9~~, wherein said filter functions (H_1, H_2, H_3, H_4) are time-invariant.

11. (currently amended) The method of ~~any one of the previous claims~~ claim 1, wherein said signals are described by the equation:

$$\begin{bmatrix} L_{ow} \\ R_{ow} \end{bmatrix} = H \begin{bmatrix} L_o \\ R_o \end{bmatrix}$$

in which the transfer function matrix (H) is a function of the spatial parameters (P).

12. (original) The method of claim 11, wherein said transfer function matrix (H) is described by the equation:

$$H = \begin{bmatrix} (1-w_l)^a + (w_l)^a H_1 & (w_r)^a H_3 \\ (w_l)^a H_2 & (1-w_r)^a + (w_r)^a H_4 \end{bmatrix}$$

with a being a constant.

13. (currently amended) The method of claim 11-~~ex-12~~, wherein said filter functions (H_1 , H_2 , H_3 , H_4) and parameters (w_1 , w_2) are selected so that the transfer function matrix (H) is invertible.

14. (currently amended) A method of ~~any one of the previous claims~~claim 1, wherein said spatial parameters (P) contain information describing signal levels of the N-channel signal.

15. (original) A device for processing a stereo signal obtained from an encoder, which encoder encodes an N-channel audio signal into left and right signals ($L_0; R_0$) and spatial parameters (P), the device comprising:

- a post-processor (5) for post-processing said left and right signals in order to provide processed signals ($L_{0w}; R_{0w}$), in which said post-processing is controlled in dependence of said spatial parameters (P).

16. (original) An encoder apparatus comprising:

- an encoder (2) for encoding an N-channel audio signal into left and right signals ($L_0; R_0$) and spatial parameters (P), and
- a device (5) according to claim 15 for processing said left

and right signals ($L_0; R_0$) in dependence of said spatial parameters (P).

17. (currently amended) A method for processing a stereo signal comprising left and right signals ($L_{0w}; R_{0w}$), the method comprising inverting the processing in accordance with the method of ~~any one of claims 1-14~~claim 1.

18. (currently amended) A device (7) for processing a stereo signal comprising left and right signals ($L_{0w}; R_{0w}$), the device comprising means for inverting the processing in accordance with the method of ~~any one of claims 1-14~~claim 1.

19. (original) A decoder apparatus comprising:

- a device (7) according to claim 18 for processing a stereo signal comprising left and right signals ($L_{0w}; R_{0w}$), and
- a decoder for decoding the processed stereo signals ($L_0; R_0$) into an N-channel audio signal.

20. (currently amended) An audio system (1) comprising:
an encoder apparatus according to claim 16 having an encoder (2) for encoding an N-channel audio signal into left and right signals ($L_0; R_0$) and spatial parameters (P), and a device (5) for

post-processing said left and right signals ($L_0;R_0$) in order to provide processed signals ($L_{0w};R_{0w}$), said post-processing being controlled in dependence on said spatial parameters (P); and
_____ a decoder apparatus ~~according to claim 19~~for decoding said processed signals ($L_{0w};R_{0w}$), said decoder apparatus having a device for processing a stereo signal comprising left and right signals ($L_{0w};R_{0w}$), the device comprising means for inverting the post-processing performed in the encoder apparatus in order to provide stereo signals ($L_0;R_0$), and a decoder for decoding the stereo signals ($L_0;R_0$) into an N-channel audio signal.